Tenyue









Tengyue Machinery The leading brand of bottle blowing machines



The provider of integrated solutions for liquid packaging systems

Customer centric Honest And Reliable Innovative excellence





52000m² Factory area 200+ Million Yuan Fixed assets 15+years R&D history 37+items
Patents

50% Energy saving 50% Production efficiency improvement 90%+ Reduction of maintenance cost 23+ Cooperative countries and regions



Total solution provider for liquid packaging complete line system

Tengyue Machinery is determined to become a first-class brand of liquid packaging in China. It is a high-tech enterprise integrating R & D, production, sales & service. It has always adhered to the business philosophy of driving development through R & D innovation and empowering users with energy saving, high efficiency, lean, stability and easy operation. It focuses on providing global users with barrel water type, variable pitch type, equidistant type bottle blowing machines and liquid packaging whole line system solutions.

In the field of two-step fully automatic PET bottle blowing machine equipment, Tengyue Machinery leads the industry development with innovative technology. It has developed more than 40 models, with the maximum output of up to 24,000/hr. It is widely used in packaging fields such as beverages, food, daily chemicals, medical care, etc. It is very popular in China, and radiates to foreign regions such as Southeast Asia, Middle East, South America and Europe. The customer satisfaction rate has reached 100%, and the repurchase rate has reached more than 90% with good reputation.

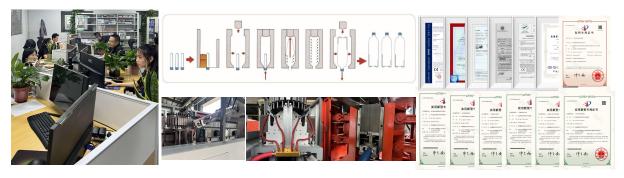






Innovative R & D design

Tengyue Machinery has 12 senior R & D and design talents. With a modular, integrated and tandardized R & D management system, it has independently developed and iterated the bottle blowing machine equipment to the market-leading level. To empower users, it is still in the process of continuous innovation.



Lean Manufacturing Center

Tengyue Machinery is equipped with an equipment manufacturing center, a mold and machining center, and an inspection and testing center. It possesses high-precision CNC processing equipment and nearly 20 sets of turning-milling compound equipment. It strictly follows the requirements of ISO9001 quality management system to control the production quality throughout the whole process.



Applications



- Beverage packaging
- Edible oil packaging
- o Daily chemical packaging
- o Pharmaceutical packaging
- Pesticide packaging, etc.



• capacity range: $5 \sim 20L$

• cavity range: $1 \sim 4$

energy-saving · efficient · precise · stable · easy to operate

Product Design & Value Proposition

Reduce operating costs, saving more than 50% energy compared to traditional bottle blowing machines

- The modular design of the whole machine saves more than 30% of floor space.
- The application of new insulation materials in the heating module, combined with the energy-saving design of water channels and air ducts, effectively saves about 50% of energy.
- Optimized design of blow molding air routes reduces air consumption by 20--40%.
- Paired with Tengyue custom blow molding molds, it shortens the bottle bottom forming time and reduces chiller energy consumption by over 50%.
- Equipped with smart meters for easy monitoring of electricity consumption at any time.

Cutting-edge design The output can reach 1500 pieces/hr

Ensure operational stability and increase production efficiency by more than 30%

- Variable speed preform sorting design reduces the likelihood of preform jams and improves sorting efficiency.
- Optimized variable pitch structure ensures precise and reliable operation.
- Fully electric drive structure enables sustainable production.
- Optimized sealing head design prevents bottle mouth leakage, reduces jamming, and improves product quality.
- The servo system for electrical control enhances operational stability.

Easy to operate and maintain, reducing labor costs by more than 50%

- Special design of the lamp holder plate extends the lifespan of wear-prone parts.
- Optimized clamp plates and conveyor structure have no wear-prone parts and require no maintenance.
- Adopt a quick mold change structure and use graphite bronze sleeves for mold closing, eliminating the need for lubrication and reducing maintenance costs.
- Ergonomically designed swing arm control panel.
- Soldered wire terminals and standardized color coding for wires prevent poor connections and facilitate maintenance.

Application







Parameters

Description		units	TYB5-1	TYB12-1	TYB20-1	TYBPro20-1	
		units	Variable pitch parameters				
main machine parameters	cavity	cavity	1	1	1	1	
	Heating distance	mm	64.78	64.78	64.78	64.78	
	Bottle spacing	mm	320	320	320	320	
	Preform NO.	pcs	64	64	64	64	
Product parameters	weight	g	85	190	270	270	
	Maximum bottle capacity	L	5	12	20	20	
	Maximum bottle height	mm	340	400	480	480	
	Maximum bottle diameter	mm	180	220	280	280	
	Maximum preform height	mm	190	240	250	250	
	Tooth outer diameter	mm	60	60	60	60	
Theoretical yield		B.P.H	1500	800	800	1000	
	Heating light box	units	3	3	3	4	
Electrical	lamps NO.	pcs	33	42	48	64	
parameters	Installed power	KW	49.5	63	72	96	
	Actual power usage	KW	15-20	25-30	38-40	35-45	
Gas source parameters	High pressure gas consumption	m³	8	8	8	10	
	Low pressure gas consumption	m^3	0	0	0	0	
	Cooling machine		5P	7P	7P	7P	
	Machine weight	kg	5500	6000	7000	7500	
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Note: Due to product improvement, parameters are subject to change without prior notice. Special equipment and molds can be designed and customized according to customer needs.









Henan Tengyue Machinery Technology Co., Ltd.





Variable pitch blow molding machine

• capacity range: $0.1 \sim 2L$

• cavity range: $4 \sim 12$

energy-saving \cdot efficient \cdot precise \cdot stable \cdot easy to operate

Product Design & Value Proposition

Reduce operating costs, saving more than 50% energy compared to traditional bottle blowing machines

- Modular design of the entire machine saves approximately 30% of floor space.
- Application of new insulation materials in the heating module, combined with energy-saving designs for water and air ducts, effectively saves about 50% of energy.
- Optimized blow molding air routes reduce air consumption by 20-40%.
- Paired with Tengyue custom blow molding molds, it shortens the bottle bottom forming time and reduces chiller energy consumption by over **50%**.
- Equipped with smart meters for easy monitoring of electricity consumption at any time.

Technology upgrades
Energy saving up to 50%

Ensures production stability with a maximum output of 24,000 units per hour.

- Variable speed preform sorting design improves sorting efficiency.
- Innovative structure optimization of the variable pitch mechanism ensures precise and reliable operation.
- Fully electric drive structure supports sustainable production.
- Optimized sealing head design prevents bottle mouth leakage and enhances product quality.
- Utilizes 11 Trio electric control servo systems to enhance operational stability.

Easy to operate and maintain, reducing labor costs by over 50%.

- Special design of the lamp holder plate extends the lifespan of wear-prone parts.
- Optimized clamp plates and conveyor structure have no wear-prone parts and require no maintenance.
- Quick mold change structure with graphite bronze sleeves for mold closing reduces maintenance costs.
- Ergonomically designed swing arm control panel.
- Soldered wire terminals and standardized color coding for wires prevent poor connections and facilitate maintenance.

Application







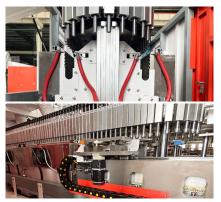
Parameters

Description		units	TYB600-6	TYB600-7	TYB600-8	TYB600-10	TYB600-12	TYB1500-5	TYB1500-6	TYB1500-8
main machine parameters	cavity	cavity	6	7	8	10	12	5	6	8
	Heating distance	mm	38	38	38	38/50	38	50	38	38
	Bottle spacing	mm	80	80	80	80	80	120	100	100
	Preform NO.	pcs	112	149	150	28/30/204 38/156	214	113	148	202
Product parameters	weight	g	14	14	14	14	14	32	32	32
	Maximum bottle capacity	ml	500	500	500	500	500	1500	1500	1500
	Maximum bottle height	mm	240	240	240	240	240	340	340	340
	Maximum bottle diameter	mm	70	70	70	70	70	108	90	90
	Maximum preform height	mm	100	100	100	100	100	120	120	120
	Tooth outer diameter	mm	≤30	≤30	≤30	≤30	≤30	38	≤30	≤30
Theoretical yield		B.P.H	12000/h	14000/h	16000/h	20000/h	24000/h	7500/h	9000/h	12000/h
Electrical parameters	Heating light box	units	4	4	4	6	6	4	4	6
	lamps NO.	pcs	24	24	24	36	36	36	32	48
	Installed power	KW	36	48	48	72	72	72	64	96
	Actual power usage	KW	18	21	24	30	36	36	35	45
Gas source parameters	High pressure gas consumption	m3	6	8	10	10	12	8	12	16
	Low pressure gas consumption	m3	0	0	0	0	0	0	0	0
cooling machine		HP	7	7	8	10	12	7	7	8
Machine weight		kg	6000	8000	9000	10000	12000	8000	8000	9000

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• capacity range: $0.1 \sim 3.5L$

• cavatiy range: $2 \sim 6$

energy-saving · efficient · precise · stable · easy to operate

Product Design & Value Proposition

Reduces operating costs, achieving over 30% energy savings compared to traditional blow molding machines.

- Modular design of the entire machine saves approximately 30% of floor space.
- Integrated heating box design withstands temperatures up to 130°C, saving about 30% energy compared to traditional equipment.
- Extra-long lamp box design increases the number of preforms heated to 60, and its optimized structure saves about 30% of installation time.
- Optimized blow molding air routes improve gas recovery efficiency, effectively saving 30% of energy.
- Paired with Tengyue custom blow molding molds, it shortens the bottle bottom forming time and reduces chiller energy consumption by over 50%.

Classic and stable, with the entire machine achieving up to 30% energy savings.

Ensures production stability with a maximum output of 9,000 units per hour.

- Dual-channel preform sorting design increases sorting stability.
- Split upper preform structure and high-torque rotating cylinders enhance operational efficiency.
- Hollow design of the cast aluminum alloy frame effectively shields against bottle jamming risks.
- Dual-drive U-shaped stainless steel self-lubricating chain design improves operational stability.
- Hollow chain design combined with centrifugal fan configuration enhances product quality and energy savings.

Easy to operate and maintain, reducing labor costs by over 50%.

- Scientifically designed control screen placement for full-angle monitoring of operations.
- Integrated preform handling design and gripper design facilitate installation and operation.
- Optimized design of the upper and lower preform mechanical arms, and patented bottom mold design, requires no maintenance.
- Plug-and-play preform head design for ease of operation and time-saving.
- Soldered wire terminals and standardized color coding for wires prevent poor connections and facilitate maintenance.

Application







Parameters

description		units	TYD600-4	TYD600-6	TYD750-2	TYD750-4	TYD750S-4	TYD1500-2	TYD1500-4	TYD1500S-4
main machine parameters	cavity	cavity	4	6	2	4	4	2	4	4
	Heating distance	mm	76	76	100	100	100	100	100	100
	Bottle spacing	mm	76	76	100	100	100	100	100	100
	Preform NO.	pcs	84	114	40	66	66	40	66	66
Product parameters	weight	g	14	14	14	14	14	32	32	32
	Maximum bottle capacity	ml	600	600	750	750	750	1500	1500	1500
	Maximum bottle height	mm	240	240	240	240	240	340	340	340
	Maximum bottle diameter	mm	68	68	70	70	70	90	90	90
	Maximum preform height	mm	100	100	100	100	100	120	120	120
	Tooth outer diameter	mm	18-38	18-38	18-38	18-38	18-38	18-38	18-38	18-35
Theoretical yield		B.P.H	6500	9000	2400	4500	4500	1800	3500	3500-4000
Electrical parameters	Heating light box	units	4	6	1	4	4	1	4	4
	lamps NO.	pcs	24	36	14	24	24	16	32	32
	Installed power	KW	48	72	28	48	48	32	64	64
	Actual power usage	KW	25	35	10	25	25	14	40	40
Gas source parameters	High pressure gas consumption	m^3	3.6-4	6	1.2	2.4	3.6	2.4	4.8	4.8
	Low pressure gas consumption	m^3	0	0	1.2 (7.5KW)	2.4 (15KW)	0	1.2 (7.5KW)	2 (15KW)	0
cooling machine		HP	5P	8P	3P	5P	5P	5P	5P	5P
M	Machine weight		4000	6500	1300	4000	4000	1300	3500	3500

Note: Due to product improvement, parameters are subject to change without prior notice. Special equipment and molds can be designed and customized according to customer needs.







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